

<110> Rosen et al.

<120> 15 Human secreted proteins

<130> P1040P1

<140> Unassigned

<141> 2001-02-13

<150> PCT/US00/22325

<151> 2000-08-16

<150> 60/149,182

<151> 1999-08-17

<160> 36

<170> PatentIn Ver. 2.0

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<212> DNA

<213> Homo sapiens

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<210> 3

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<212> PRT

<213> Homo sapiens

<220>

<221> Site

<222> 3)

<223> Xaa equals any of the twenty naturally occurring L-amino acids

<400> 2

Trp Ser Xaa Trp Ser

1

5

<210> 3

<211> 36

<212> DNA  
 <213> Artificial Sequence

<220>  
 <221> Primer\_Bind  
 <223> Synthetic sequence with 4 tandem copies of the GAS binding site found in the IRF1 promoter (Rothman et al., Immunity 1:457-468 (1994)), 13 nucleotides complementary to the SV40 early promoter, and a Xho I restriction site.

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<210> 4  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> Primer\_Bind  
 <223> Synthetic sequence complementary to the SV40 promoter; includes a Hind III restriction site.

<400> 4  
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<210> 5  
 <211> 271  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> Protein\_Bind  
 <223> Synthetic promoter for use in biological assays; includes GAS binding sites found in the IRF1 promoter (Rothman et al., Immunity 1:457-468 (1994)).

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 gcccttaact ccgcccagtt ccgcccattc tccgcccatt ggctgactaa ttttttttat 180  
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<210> 6  
 <211> 32  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> Primer\_Bind  
 <223> Synthetic primer complementary to human genomic EGR-1 promoter sequence (Sakamoto et al., Oncogene 6:367-371 (1991)); includes a Xho I restriction site.

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30

<210> 7  
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<212> DNA  
<213> Artificial Sequence

<220>  
<221> Primer\_Bind  
<223> Synthetic primer complementary to human genomic EGR-1 promoter sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a Hind III restriction site.

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31

<210> 8  
<211> 12  
<212> DNA  
<213> Homo sapiens

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12

<210> 9  
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<212> DNA  
<213> Artificial Sequence

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<221> Primer\_Bind  
<223> Synthetic primer with 4 tandem copies of the NF-KB binding site (GGGGACTTTCCC), 18 nucleotides complementary to the 5' end of the SV40 early promoter sequence, and a XhoI restriction site.

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60

73

<210> 10  
<211> 256  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> Protein\_Bind  
<223> Synthetic promoter for use in biological assays; includes NF-KB binding sites.

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cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga

60

120

180

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241  
 266

<210> 11  
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 <212> DNA  
 <213> Homo sapiens

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 <213> Homo sapiens

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&lt;211&gt; 2149

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 14

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 <212> DNA  
 <213> Homo sapiens

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 <212> DNA

## &lt;213&gt; Homo sapiens

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&lt;210&gt; 21

&lt;211&gt; 1061

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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1620  
1680  
1740  
1799

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1256

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aagtgcatta	gtttctccat	ttttatcttc	tgaactgtac	actcccaact	taggtttctt	750
tgagattaat	agatatggg	ggaaaaaa				808

<210> 39  
 <211> 1170  
 <212> DNA  
 <213> Homo sapiens

<400> 39						60
gctcctgggc	ctcacaaagt	gttgggatta	caggtatgag	ccacggcacc	tggcctgggt	120
tcttaactgg	ttccctaaga	cagctggaaa	tagagaatgt	catggagcat	tcttaacctt	180
gggtctcagc	ctggctttca	ttctgtttct	cccttgaaac	aacattctct	tagtaatat	240
ccgaataaca	gcttcctcag	ttgtgtctac	gaccactctt	caggcttcat	cttatatgac	300
ctcccaaaact	gcactaaggg	ttgtattaga	gaaaagtggg	taaagtccgg	agtcaggctg	360
ctttagctta	aatgccagct	tcacttacca	gccacctgac	catgagtcag	ctgcttaact	420
attcttttgc	acagtttctt	tgtctatgaa	aagggaatg	gctccacact	caaaaagtgt	480
ttaacattaa	attcaatcat	gtattcaaa	tcctgagcag	aatgtctggc	catgactggg	540
acttaacaga	tggttagcatt	tattattagt	atctgtcagt	cttgaaatgt	tctcttctct	600
tggctttcat	gacattccac	actctcctgg	ttttctctta	ctctctctgt	aatacctggt	660
tgcttatcct	tctttgtcca	gctctgggat	gttaccattc	cttcaggcgt	gctgtttctt	720
ctttaggcag	tcttacacac	actcatgact	tccttccatt	gtctccaca	cactgatgac	780
cttaaaatca	gtatctccag	cctaaacctt	tccactgagt	tctagacca	tatgttgtac	840
tatcaacctg	gcttggtcat	ttgaatgtct	tccaggcact	tcagactctc	ttctctagac	900
tttgctggac	tttcaactct	ccccctaaaa	ctggctctct	ttccactgaa	acatgtatgt	960
cattgagagg	caccaccatc	caccacgtgc	ctaagccaga	aacctaggaa	tccttgatac	1020
ctgttctctc	tcattcctgca	tatccaagcc	tatcagtttt	atctctaaat	tatatcttgg	1080
taggtttact	tctttccttt	tctcccacca	ccacctgtct	ccaagctacc	atcatctcac	1140
ccagaggttg	cagtgcagccc	agatcacgcc	actgcactcc	agcctgggtg	cagagtaaga	1170
ctccatctca	aaaaaaaaaa	aaaaaaaaaa				

<210> 40  
 <211> 523  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> .502)  
 <223> n equals a,t,g, or c

<400> 40						60
gaatttcggca	cgaggcrgsg	cggcggcgccg	ggcggcggcg	gcggctgttg	aggccgcagt	120
ccgggtccctg	gcttcggcct	cagcccccacc	atgggtgacgc	ttgctgaact	gctgggtgtc	180
ctggccgctc	tcctgggcac	ggctctggggc	tattttcgtta	gcacgcagc	ccatgctgaa	240
gagtgcctct	ttgagcgggt	caacctcgggc	accaagatgg	gcttcctctt	cgaggtggcg	300
gagggcgggc	tcctggacat	cgacgtggag	gtgcggggcta	gctgcccgc	gctgagggtt	360
sgtcgggttg	ccactcgggg	attggctggca	ctggggaccg	gcgcggggcc	tgtgtgggga	420
gtgggcttgg	aagtgcctgt	ccgagtcctg	gagaagccca	ggccggccacc	ccccgccccg	480
ccccggccac	ggcgacctcc	naacggcccc	ttttcccgcg	acttgccctg	gttccgggat	523
cccttggggg	ctccttcggc	angcttgggt	gctttgggtt	ttc		

<210> 41

<211> 2508  
 <212> DNA  
 <213> Homo sapiens

<400> 41  
 cttatagtgga tgagggtacct ctttgccttc ctcaatcato tatcacagta cagcagtgag 60  
 aatattgatgg accctataac ctggccattt gctttggccc aacattgatg cctgtcccag 120  
 aaatacagga tcaagtgtct tgccaggcac atgtgaatga aattatcaaa accatcatca 180  
 tccaccatga gactattttt ccagatgcta aagagctgga tggccctgtt tatgagaaat 240  
 gtatggctgg agatgactat tgcgacaccc atacagtggag caccgtacat tggaggaagt 300  
 ggaccaaagat gctgggtacag agccctaac aagtgaagat gaatgtgagc caatagaagc 360  
 aatagccaag tttgactatg ttggggcggtc cgccagagaa ctatccttca agaagggtgc 420  
 ctccctgctg ctgtatcacc gtgcattctga ggactgggtg gaaggcaggg acaacgggat 480  
 tgaagggtctg gtgctcacc agtataragt ggtgcaggat atggatgata cgttttcaga 540  
 cactctgagc caaaaagctg acagtggagc cagcagtggtg ccagtcacgg aagacaagtc 600  
 ctcctccaaag gacatgaact ccccgacaga cctcctatct gacggctatt tagccaggca 660  
 atgaaaaaga ggagagccac cccctccagt aaggcgctct ggccaggacca gtgatggcca 720  
 ttgcccgcct caccctccac atgccccttc taactcctca gttgacctag ggtccccaag 780  
 ccttgccagt caccctccggg gcctcctgca gaacgtgggc ctcaacaatg acagtcctga 840  
 ggggaggcgc aggcctggcc atggcagcct gaccaacato gggcaatata cgggcttcaa 900  
 gaagatcgac agccctccca ttagaaggct cactgcatca gggaatata cgggcttcaa 960  
 tgaccacaag ccactggacc cagagacaat tgctcaggat attgaagaaa cgatgaacac 1020  
 agctttgaat gaactccgag aactggagag acagagcaca gcaaaagcatg cccctgatgt 1080  
 ggtgctggat accctggagc aagtgaaaaa ctctcccacc cctgcccactt ccacggaatc 1140  
 tctcagccct ttgcacaacg ttgctctcag gagctccgag cctcagattc gacgtagcac 1200  
 gactcctctc agtgacacaa ttaggccaaa acctgtgtgt cttccaaaaa caaatcctac 1260  
 gcagctgaag cctccagccc cccagggctc aacagacaag tcatgcacaa tgtaaaaacc 1320  
 cataggacct gccccacct cccagggctc aaaaaaagaa aatggattag tgacaaaagt 1380  
 agccaagcaa ggccataaaag ggaggtgact taataaactg gagatctttt ggcttttcta 1440  
 cactgatccw taacttctct tagttttgtg cttataactg gggcattttg atttttgtaat 1500  
 tgtttgtcga tgtaattgtct gagactagct aaattaacac gggcattttg atttttgtaat 1560  
 ttttttaaat aactggacat atgtcatttt aaggacaata gaaacactta gacttacttg 1620  
 aaaatccaat gctgcaccac ttgtaatgaa ggcaacaccg ctctccacat tgtacagagc 1680  
 ttcaggttta atgtagccca gctgagtcag aaagggttgt acctgaaggc agaagaacct 1740  
 gaatgccaca cctcattbga statagccag tgttggtctg tggcacttgg gctgaaaggc 1800  
 gataatggca ttgctgtgta gctgacaatg agcaccttcg gttccatgtg gagcgggggtt 1860  
 tagctcatgc aaaagacttg caattgtctc catgggacga tcccagtggg actgtcagcc 1920  
 cacagctcga gtgggttgga tgcttgcttc tttcctaaca gttatttccc cgggtccagc 1980  
 ttaaagactc gatggaagga ggtagaacct ctgtgtttac tgcttgaact taacctggga 2040  
 aaggagagga agacaccatc tccaaagcta ttaatgtcac tcccttttgc agcatgatta 2100  
 ggtccctggag atttccaagt ccccccattt acacttaca aagattagaa gggttttaatt 2160  
 ttaaagactt tctgggttaca ctactccacg aactcctcca aagatccgtt attcaataac 2220  
 tgcttagaaa atgtttccat ctcttctaaa tccctgtgtt cctctctgtg gaaatgaagg 2280  
 cagcaagaag cactgagggc cttgggttcat gcagtgttct cttttgacta aatcacctag 2340  
 gttcctttta acatgttaca aagcccaggc atgggtgtgc acacctgtac tccaggtac 2400  
 tgggtgtgt tacacaggag gatggcttg ggcctagtag ttgagttcca gctggggcag 2460  
 catagtgtga gacccctgtct cttaaaaaaa aaaaaaaa ctcga 2508

<210> 42  
 <211> 914  
 <212> PPT  
 <213> Homo sapiens

<400> 42  
 Met Gly Pro Phe Lys Ser Ser Val Phe Ile Leu Ile Leu His Leu Leu  
 1 5 10 15



Glu Gly Ala Leu Ser Asn Ser Leu Ile Gln Leu Asn Asn Asn Gly Tyr  
 20 35 30

Glu Gly Ile Val Val Ala Ile Asp Pro Asn Val Pro Glu Asp Glu Thr  
 35 40 45

Leu Ile Gln Gln Ile Lys Asp Met Val Thr Gln Ala Ser Leu Tyr Leu  
 50 55 60

Phe Glu Ala Thr Gly Lys Arg Phe Tyr Phe Lys Asn Val Ala Ile Leu  
 65 70 75 80

Ile Pro Glu Thr Trp Lys Thr Lys Ala Asp Tyr Val Arg Pro Lys Leu  
 85 90 95

Glu Thr Tyr Lys Asn Ala Asp Val Leu Val Ala Glu Ser Thr Pro Pro  
 100 105 110

Gly Asn Asp Glu Pro Tyr Thr Glu Gln Met Gly Asn Cys Gly Glu Lys  
 115 120 125

Gly Glu Arg Ile His Leu Thr Pro Asp Phe Ile Ala Gly Lys Lys Leu  
 130 135 140

Ala Glu Tyr Gly Pro Gln Gly Arg Ala Phe Val His Glu Trp Ala His  
 145 150 155 160

Leu Arg Trp Gly Val Phe Asp Glu Tyr Asn Asn Asp Glu Lys Phe Tyr  
 165 170 175

Leu Ser Asn Gly Arg Ile Gln Ala Val Arg Cys Ser Ala Gly Ile Thr  
 180 185 190

Gly Thr Asn Val Val Lys Lys Cys Gln Gly Gly Ser Cys Tyr Thr Lys  
 195 200 205

Arg Cys Thr Phe Asn Lys Val Thr Gly Leu Tyr Glu Lys Gly Cys Glu  
 210 215 220

Phe Val Leu Gln Ser Arg Gln Thr Glu Lys Ala Ser Ile Met Phe Ala  
 225 230 235 240

Gln His Val Asp Ser Ile Val Glu Phe Cys Thr Glu Gln Asn His Asn  
 245 250 255

Lys Glu Ala Pro Asn Lys Gln Asn Gln Lys Cys Asn Leu Arg Ser Thr  
 260 265 270

Trp Glu Val Ile Arg Asp Ser Glu Asp Phe Lys Lys Thr Thr Pro Met  
 275 280 285

Thr Thr Gln Pro Pro Asn Pro Thr Phe Ser Leu Leu Gln Ile Gly Gln  
 290 295 300

Arg Ile Val Cys Leu Val Leu Asp Lys Ser Gly Ser Met Ala Thr Gly  
 305 310 315 320

Asn Arg Leu Asn Arg Leu Asn Gln Ala Gly Gln Leu Phe Leu Leu Gln

323 330 335  
 Thr Val Glu Leu Gly Ser Trp Val Gly Met Val Thr Phe Asp Ser Ala  
 340 345 350  
 Ala His Val Gln Ser Glu Leu Ile Gln Ile Asn Ser Gly Ser Asp Arg  
 355 360 365  
 Asp Thr Leu Ala Lys Arg Leu Pro Ala Ala Ala Ser Gly Gly Thr Ser  
 370 375 380  
 Ile Cys Ser Gly Leu Arg Ser Ala Phe Thr Val Ile Arg Lys Lys Tyr  
 385 390 395 400  
 Pro Thr Asp Gly Ser Glu Ile Val Leu Leu Thr Asp Gly Glu Asp Asn  
 405 410 415  
 Thr Ile Ser Gly Cys Phe Asn Glu Val Lys Gln Ser Gly Ala Ile Ile  
 420 425 430  
 His Thr Val Ala Leu Gly Pro Ser Ala Ala Gln Glu Leu Glu Glu Leu  
 435 440 445  
 Ser Lys Met Thr Gly Gly Leu Gln Thr Tyr Ala Ser Asp Gln Val Gln  
 450 455 460  
 Asn Asn Gly Leu Ile Asp Ala Phe Gly Ala Leu Ser Ser Gly Asn Gly  
 465 470 475 480  
 Ala Val Ser Gln Arg Ser Ile Gln Leu Glu Ser Lys Gly Leu Thr Leu  
 485 490 495  
 Gln Asn Ser Gln Trp Met Asn Gly Thr Val Ile Val Asp Ser Thr Val  
 500 505 510  
 Gly Lys Asp Thr Leu Phe Leu Ile Thr Trp Thr Thr Gln Pro Pro Gln  
 515 520 525  
 Ile Leu Leu Trp Asp Pro Ser Gly Gln Lys Gln Gly Gly Phe Val Val  
 530 535 540  
 Asp Lys Asn Thr Lys Met Ala Tyr Leu Gln Ile Pro Gly Ile Ala Lys  
 545 550 555 560  
 Val Gly Thr Trp Lys Tyr Ser Leu Gln Ala Ser Ser Gln Thr Leu Thr  
 565 570 575  
 Leu Thr Val Thr Ser Arg Ala Ser Asn Ala Thr Leu Pro Pro Ile Thr  
 580 585 590  
 Val Thr Ser Lys Thr Asn Lys Asp Thr Ser Lys Phe Pro Ser Pro Leu  
 595 600 605  
 Val Val Tyr Ala Asn Ile Arg Gln Gly Ala Ser Pro Ile Leu Arg Ala  
 610 615 620  
 Ser Val Thr Ala Leu Ile Glu Ser Val Asn Gly Lys Thr Val Thr Leu  
 625 630 635 640

Glu Leu Leu Asp Asn Gly Ala Gly Ala Asp Ala Thr Lys Asp Asp Gly  
 645 650 655  
 Val Tyr Ser Arg Tyr Phe Thr Thr Tyr Asp Thr Asn Gly Arg Tyr Ser  
 660 665 670  
 Val Lys Val Arg Ala Leu Gly Gly Val Asn Ala Ala Arg Arg Arg Val  
 675 680 685  
 Ile Pro Gln Gln Ser Gly Ala Leu Tyr Ile Pro Gly Trp Ile Glu Asn  
 690 695 700  
 Asp Glu Ile Gln Trp Asn Pro Pro Arg Pro Glu Ile Asn Lys Asp Asp  
 705 710 715 720  
 Val Gln His Lys Gln Val Cys Phe Ser Arg Thr Ser Ser Gly Gly Ser  
 725 730 735  
 Phe Val Ala Ser Asp Val Pro Asn Ala Pro Ile Pro Asp Leu Phe Pro  
 740 745 750  
 Pro Gly Gln Ile Thr Asp Leu Lys Ala Glu Ile His Gly Gly Ser Leu  
 755 760 765  
 Ile Asn Leu Thr Trp Thr Ala Pro Gly Asp Asp Tyr Asp His Gly Thr  
 770 775 780  
 Ala His Lys Tyr Ile Ile Arg Ile Ser Thr Ser Ile Leu Asp Leu Arg  
 785 790 795 800  
 Asp Lys Phe Asn Glu Ser Leu Gln Val Asn Thr Thr Ala Leu Ile Pro  
 805 810 815  
 Lys Glu Ala Asn Ser Glu Glu Val Phe Leu Phe Lys Pro Glu Asn Ile  
 820 825 830  
 Thr Phe Glu Asn Gly Thr Asp Leu Phe Ile Ala Ile Gln Ala Val Asp  
 835 840 845  
 Lys Val Asp Leu Lys Ser Glu Ile Ser Asn Ile Ala Arg Val Ser Leu  
 850 855 860  
 Phe Ile Pro Pro Gln Thr Pro Pro Glu Thr Pro Ser Pro Asp Glu Thr  
 865 870 875 880  
 Ser Ala Pro Cys Pro Asn Ile His Ile Asn Ser Thr Ile Pro Gly Ile  
 885 890 895  
 His Ile Leu Lys Ile Met Trp Lys Trp Ile Gly Glu Leu Gln Leu Ser  
 900 905 910  
 Ile Ala

<212> PRT  
 <213> Homo sapiens

<400> 43  
 Met Val Ala Thr Val Ala Ala Ala Trp Leu Leu Leu Trp Ala Ala  
 1 5 10 15  
 Ala Cys Ala Gln Gln Glu Gln Asp Phe Tyr Asp Phe Lys Ala Val Asn  
 20 25 30  
 Ile Arg Gly Lys Leu Val Ser Leu Glu Lys Tyr Arg Gly Ser Val Ser  
 35 40 45  
 Leu Val Val Asn Val Ala Ser Glu Cys Gly Phe Thr Asp Gln His Tyr  
 50 55 60  
 Arg Ala Leu Gln Gln Leu Gln Arg Asp Leu Gly Pro His His Phe Asn  
 65 70 75 80  
 Val Leu Ala Phe Pro Cys Asn Gln Phe Gly Gln Gln Glu Pro Asp Ser  
 85 90 95  
 Asn Lys Glu Ile Glu Ser Phe Ala Arg Arg Thr Tyr Ser Val Ser Phe  
 100 105 110  
 Pro Met Phe Ser Lys Ile Ala Val Thr Gly Thr Gly Ala His Pro Ala  
 115 120 125  
 Phe Lys Tyr Leu Ala Gln Thr Ser Gly Lys Glu Pro Thr Trp Asn Phe  
 130 135 140  
 Trp Lys Tyr Leu Val Ala Pro Asp Gly Lys Val Val Gly Ala Trp Asp  
 145 150 155 160  
 Pro Thr Val Ser Val Glu Glu Val Arg Pro Gln Ile Thr Ala Leu Val  
 165 170 175  
 Arg Lys Leu Ile Leu Leu Lys Arg Glu Asp Leu  
 180 185

<210> 44  
 <211> 346  
 <212> PRT  
 <213> Homo sapiens

<400> 44  
 Met Asp Pro Ala Arg Lys Ala Gly Ala Gln Ala Met Ile Trp Thr Ala  
 1 5 10 15  
 Gly Trp Leu Leu Leu Leu Leu Leu Arg Gly Gly Ala Gln Ala Leu Glu  
 20 25 30  
 Cys Tyr Ser Cys Val Gln Lys Ala Asp Asp Gly Cys Ser Pro Asn Lys  
 35 40 45  
 Met Lys Thr Val Lys Cys Ala Pro Gly Val Asp Val Cys Thr Glu Ala  
 50 55 60

Val Gly Ala Val Glu Thr Ile His Gly Gln Phe Ser Leu Ala Val Arg  
 65 70 75 80  
 Gly Cys Gly Ser Gly Leu Pro Gly Lys Asn Asp Arg Gly Leu Asp Leu  
 85 90 95  
 His Gly Leu Leu Ala Phe Ile Gln Leu Gln Gln Cys Ala Gln Asp Arg  
 100 105 110  
 Cys Asn Ala Lys Leu Asn Leu Thr Ser Arg Ala Leu Asp Pro Ala Gly  
 115 120 125  
 Asn Glu Ser Ala Tyr Pro Pro Asn Gly Val Glu Cys Tyr Ser Cys Val  
 130 135 140  
 Gly Leu Ser Arg Glu Ala Cys Gln Gly Thr Ser Pro Pro Val Val Ser  
 145 150 155 160  
 Cys Tyr Asn Ala Ser Asp His Val Tyr Lys Gly Cys Phe Asp Gly Asn  
 165 170 175  
 Val Thr Leu Thr Ala Ala Asn Val Thr Val Ser Leu Pro Val Arg Gly  
 180 185 190  
 Cys Val Gln Asp Glu Phe Cys Thr Arg Asp Gly Val Thr Gly Pro Gly  
 195 200 205  
 Phe Thr Leu Ser Gly Ser Cys Cys Gln Gly Ser Arg Cys Asn Ser Asp  
 210 215 220  
 Leu Arg Asn Lys Thr Tyr Phe Ser Pro Arg Ile Pro Pro Leu Val Arg  
 225 230 235 240  
 Leu Pro Pro Pro Glu Pro Thr Thr Val Ala Ser Thr Thr Ser Val Thr  
 245 250 255  
 Thr Ser Thr Ser Ala Pro Val Arg Pro Thr Ser Thr Thr Lys Pro Met  
 260 265 270  
 Pro Ala Pro Thr Ser Gln Thr Pro Arg Gln Gly Val Glu His Glu Ala  
 275 280 285  
 Ser Arg Asp Glu Glu Pro Arg Leu Thr Gly Gly Ala Ala Gly His Gln  
 290 295 300  
 Asp Arg Ser Asn Ser Gly Gln Tyr Pro Ala Lys Gly Gly Pro Gln Gln  
 305 310 315 320  
 Pro His Asn Lys Gly Cys Val Ala Pro Thr Ala Gly Leu Ala Ala Leu  
 325 330 335  
 Leu Leu Ala Val Ala Ala Gly Val Leu Leu  
 340 345

&lt;210&gt; 45

&lt;211&gt; 354

<212> PRT  
 <213> Homo sapiens

<400> 45  
 Met Ala Pro Ala Lys Ala Thr Asn Val Val Arg Leu Leu Leu Gly Ser  
 1 5 10 15  
 Thr Ala Leu Trp Leu Ser Gln Leu Gly Ser Gly Thr Val Ala Ala Ser  
 20 25 30  
 Lys Ser Val Thr Ala His Leu Ala Ala Lys Trp Pro Glu Thr Pro Leu  
 35 40 45  
 Leu Leu Glu Ala Ser Glu Phe Met Ala Glu Glu Ser Asn Glu Lys Phe  
 50 55 60  
 Trp Gln Phe Leu Glu Thr Val Gln Glu Leu Ala Ile Tyr Lys Gln Thr  
 65 70 75 80  
 Glu Ser Asp Tyr Ser Tyr Tyr Asn Leu Ile Leu Lys Lys Ala Gly Gln  
 85 90 95  
 Phe Leu Asp Asn Leu His Ile Asn Leu Leu Lys Phe Ala Phe Ser Ile  
 100 105 110  
 Arg Ala Tyr Ser Pro Ala Ile Gln Met Phe Gln Gln Ile Ala Ala Asp  
 115 120 125  
 Glu Pro Pro Pro Asp Gly Cys Asn Ala Phe Val Val Ile His Lys Lys  
 130 135 140  
 His Thr Cys Lys Ile Asn Glu Ile Lys Lys Leu Leu Lys Lys Ala Ala  
 145 150 155 160  
 Ser Arg Thr Arg Pro Tyr Leu Phe Lys Gly Asp His Lys Phe Pro Thr  
 165 170 175  
 Asn Lys Glu Asn Leu Pro Val Val Ile Leu Tyr Ala Glu Met Gly Thr  
 180 185 190  
 Arg Thr Phe Ser Ala Phe His Lys Val Leu Ser Glu Lys Ala Gln Asn  
 195 200 205  
 Glu Glu Ile Leu Tyr Val Leu Arg His Tyr Ile Gln Lys Pro Ser Ser  
 210 215 220  
 Arg Lys Met Tyr Leu Ser Gly Tyr Gly Val Glu Leu Ala Ile Lys Ser  
 225 230 235 240  
 Thr Glu Tyr Lys Ala Leu Asp Asp Thr Gln Val Lys Thr Val Thr Asn  
 245 250 255  
 Thr Thr Val Glu Asp Glu Thr Glu Thr Asn Glu Val Gln Gly Phe Leu  
 260 265 270  
 Phe Gly Lys Leu Lys Glu Ile Tyr Ser Asp Leu Arg Asp Asn Leu Thr  
 275 280 285

Ala Phe Gln Lys Tyr Leu Ile Glu Ser Asn Lys Gln Met Met Pro Leu  
290 295 300

Lys Val Trp Glu Leu Gln Asp Leu Ser Phe Gln Ala Ala Ser Gln Ile  
305 310 315 320

Met Ser Ala Pro Val Tyr Asp Ala Ile Lys Leu Met Lys Asp Ile Ser  
325 330 335

Gln Asn Phe Pro Ile Lys Ala Arg Val Gln Met Ile Gly Asn Val Leu  
340 345 350

Ile Gly

<210> 46  
<211> 366  
<212> PRT  
<213> Homo sapiens

<400> 46  
Met Ala Cys Leu Lys Thr Gln Arg Ala Pro Lys Ala Phe Leu Leu Leu  
1 5 10 15

Pro Leu Leu Leu Tyr Phe Ala Gly Leu Ser Lys Leu Thr Gln Leu Gln  
20 25 30

Val Cys Ser Gly Thr Asp Glu Asp Pro Asp Asp Lys Asn Ala Pro Phe  
35 40 45

Arg Gln Arg Pro Phe Cys Lys Tyr Lys Gly His Thr Ala Asp Leu Leu  
50 55 60

Asp Leu Ser Trp Ser Lys Asn Tyr Phe Leu Leu Ser Ser Ser Met Asp  
65 70 75 80

Lys Thr Val Arg Leu Trp His Ile Ser Arg Arg Glu Cys Leu Cys Cys  
85 90 95

Phe Gln His Ile Asp Phe Val Thr Ala Ile Ala Phe His Pro Arg Asp  
100 105 110

Asp Arg Tyr Phe Leu Ser Gly Ser Leu Asp Gly Lys Leu Arg Leu Trp  
115 120 125

Asn Ile Pro Asp Lys Lys Val Ala Leu Trp Asn Glu Val Asp Gly Gln  
130 135 140

Thr Lys Leu Ile Thr Ala Ala Asn Phe Cys Gln Asn Gly Lys Tyr Ala  
145 150 155 160

Val Ile Gly Thr Tyr Asp Gly Arg Cys Ile Phe Tyr Asp Thr Glu His  
165 170 175

Leu Lys Tyr His Thr Gln Ile His Val Arg Ser Thr Arg Gly Arg Asn  
180 185 190

Lys Val Gly Arg Lys Ile Thr Gly Ile Glu Pro Leu Pro Gly Glu Asn  
195 200 205

Lys Ile Leu Val Thr Ser Asn Asp Ser Arg Ile Arg Leu Tyr Asp Leu  
210 215 220

Arg Asp Leu Ser Leu Ser Met Lys Tyr Lys Gly Tyr Val Asn Ser Ser  
225 230 235 240

Ser Gln Ile Lys Ala Ser Phe Ser His Asp Phe Thr Tyr Leu Val Ser  
245 250 255

Gly Ser Glu Asp Lys Tyr Val Tyr Ile Trp Ser Thr Tyr His Asp Leu  
260 265 270

Ser Lys Phe Thr Ser Val Arg Arg Asp Arg Asn Asp Phe Trp Glu Gly  
275 280 285

Ile Lys Ala His Asn Ala Val Val Thr Ser Ala Ile Phe Ala Pro Asn  
290 295 300

Pro Ser Leu Met Leu Ser Leu Asp Val Gln Ser Glu Lys Ser Glu Gly  
305 310 315 320

Asn Glu Lys Ser Glu Asp Ala Glu Val Leu Asp Ala Thr Pro Ser Gly  
325 330 335

Ile Met Lys Thr Asp Asn Thr Glu Val Leu Leu Ser Ala Asp Phe Thr  
340 345 350

Gly Ala Ile Lys Val Phe Val Asn Lys Arg Lys Asn Val Ser  
355 360 365

<210> 47

<211> 124

<212> PRT

<213> Homo sapiens

<400> 47

Met Arg Gln Val Ala Pro Ala Arg Arg Ala Gln Leu Glu His Ser Gly  
1 5 10 15

Leu His Ala Ser Leu Cys Leu Leu Ser Leu Leu Ser Leu Leu Pro Thr  
20 25 30

Leu Glu Ala Asn Met Ser Gly Phe His Gln Ala Pro Leu Thr Leu Leu  
35 40 45

Pro Ser Cys Thr Gln Gly Asp Gly Glu Ala Arg Gly His His Thr Gln  
50 55 60

Pro Ser Phe Trp Arg Thr Glu Met Lys Cys Pro Val Glu Ala Leu Leu  
65 70 75 80

Glu His Leu Ala Thr Arg Ala Val Val Gly Arg Asn Gly Asp His Gly  
85 90 95



Ala Gln Gln Glu His Arg Thr Ala Ser Glu Gly Gln Gln Gln Pro Leu  
100 105 110

Ala Glu Ser Ser Pro Trp Trp Gln Pro Pro His Gly  
115 120

<210> 48  
<211> 74  
<212> PRT  
<213> Homo sapiens

<400> 48  
Met Ala Leu Phe Ala Trp Leu Cys Leu Ser Ala Val Val Glu Ser Ser  
1 5 10 15

Ser Pro Gly Met Cys Met Ser Lys Cys Val Leu Ile Val Met Pro Arg  
20 25 30

Gln Lys Pro Leu Glu Asp Cys Cys Arg His Ala Leu Lys Met Thr Ser  
35 40 45

His Ser Ser Glu Lys Leu Gly Asp Leu Thr Pro Glu Gly Leu Lys Ser  
50 55 60

Glu Lys Ser Gln Glu His Leu Gly Phe Lys  
65 70

<210> 49  
<211> 102  
<212> PRT  
<213> Homo sapiens

<400> 49  
Met Leu Leu His Trp Leu Leu Gln Asn Glu Leu Gln Ser Ala Val Ala  
1 5 10 15

Ser Cys Leu Val Ser Ile Ser Leu Gly Lys Glu Asp Phe Leu Gln Thr  
20 25 30

Gly Cys Lys Val Lys Ser His Val Gly Val Ile His Arg Arg Glu Lys  
35 40 45

Gly Gly Ala Ile Tyr Leu Pro Asn Ser Leu Val Leu Pro Thr Ser His  
50 55 60

Trp Ile Arg Leu Ser Tyr Arg Asn Arg His Arg Gly Phe Ile Leu Trp  
65 70 75 80

Thr Leu Met Ser Thr Trp Glu Ala Arg Cys His Gly Pro Cys Val Met  
85 90 95

Phe Asp Phe Asn Gln Lys  
100

<210> 50

<211> 51  
 <212> PRT  
 <213> Homo sapiens

<400> 50  
 Met Ile Ile Cys Leu Ile Met Phe Tyr Phe Ile Ala Leu Ala Gly Ala  
 1 5 10 15  
 His Lys Arg Val Val Ile Gln Leu Arg Glu Gln Leu Ser Leu Glu Ser  
 20 25 30  
 Arg Asp Lys Cys Tyr Leu Ile Gln Lys Leu Thr Glu Ala Gln Arg Asp  
 35 40 45  
 Met Arg Asn  
 50

<210> 51  
 <211> 68  
 <212> PRT  
 <213> Homo sapiens

<400> 51  
 Met Ala Thr Val Gly Leu Ser Trp Lys Lys Glu Leu Val Ile Leu Leu  
 1 5 10 15  
 Val Gly Pro Gly Ala Ala Ala Leu Gln Pro Thr His Thr Cys Cys Ser  
 20 25 30  
 Leu Pro Ser Leu Ser Ser Leu Phe Pro Leu Arg Leu Asn Thr Lys Thr  
 35 40 45  
 Ser Pro Lys Thr Thr Arg Thr Asn Leu Tyr Leu Leu Ser Ile Ala Pro  
 50 55 60  
 Leu Ser His Leu  
 65

<210> 52  
 <211> 85  
 <212> PRT  
 <213> Homo sapiens

<400> 52  
 Met Gln Val Phe Phe Leu Ser Glu Ile Gly Met Leu Trp Val Val Val  
 1 5 10 15  
 Lys Met Ala His Ser Ala Met Leu Val Ser His Thr Gln Asp Pro Thr  
 20 25 30  
 Pro Ser Arg Trp Pro Cys Ser Leu Ala Gln Ser Ile Leu Leu Thr Cys  
 35 40 45  
 Ser Pro Gln His Arg Phe Ser Leu Glu Arg Lys Ile Gln Leu Pro Pro  
 50 55 60

Arg Arg Trp Trp Ala Glu Gly Arg Glu Gly Cys Trp Val Arg Glu Arg  
 65 70 85 90

Val Gly Glu Arg Thr  
 85

<210> 53  
 <211> 83  
 <212> PRT  
 <213> Homo sapiens

<400> 53  
 Met Ala Ser Cys Gly Leu Thr Gly Ala Ser Leu Pro Pro Cys Cys Cys  
 1 5 10 15

Ser Ser Phe Leu Ala Ala Leu Lys Ser Met Phe Trp Gly Leu Gly Ser  
 20 25 30

Leu Leu Trp Ser Leu Val Gly Ile Leu Ser Pro Ile Ser Ser Cys Phe  
 35 40 45

Cys Val Tyr Thr Cys Leu Thr Pro Gly Ser Ser Ser Leu Phe Pro Arg  
 50 55 60

Ala Val Thr Gln Lys Leu Glu Gln Ser Val Pro Thr Lys Ala Leu Trp  
 65 70 75 80

Gly Trp Met

<210> 54  
 <211> 157  
 <212> PRT  
 <213> Homo sapiens

<400> 54  
 Met Gln Ala Pro Arg Ala Ala Leu Val Phe Ala Leu Val Ile Ala Leu  
 1 5 10 15

Val Pro Val Gly Arg Gly Asn Tyr Glu Glu Leu Glu Asn Ser Gly Asp  
 20 25 30

Thr Thr Val Glu Ser Glu Arg Pro Asn Lys Val Thr Ile Pro Ser Thr  
 35 40 45

Phe Ala Ala Val Thr Ile Lys Glu Thr Leu Asn Ala Asn Ile Asn Ser  
 50 55 60

Thr Asn Phe Ala Pro Asp Glu Asn Gln Leu Glu Phe Ile Leu Met Val  
 65 70 75 80

Leu Ile Pro Leu Ile Leu Leu Val Leu Leu Leu Leu Ser Val Val Phe  
 85 90 95

Leu Ala Thr Tyr Tyr Lys Arg Lys Arg Thr Lys Gln Glu Pro Ser Ser  
 100 105 110

Gln Gly Ser Gln Ser Ala Leu Gln Thr Cys Glu Tyr Tyr Pro Lys Thr  
 110 120 125

Cys Leu Gln Val Gly Val Gly Leu Glu Lys Glu Gln Arg Cys Phe Lys  
 130 135 140

Ile Lys Gln Gln Gly Leu His Ile Ile Val Ser Asp Lys  
 145 150 155

<210> 55  
 <211> 57  
 <212> PRT  
 <213> Homo sapiens

<400> 55  
 Met Cys Glu Gly Trp Leu His Pro Ile Phe Leu Tyr Cys Cys Phe Trp  
 1 5 10 15

Thr Thr Thr Pro Ser Cys Ser Ala Phe Gly Ile Leu Asp Leu His Gln  
 20 25 30

Gln His Pro Ile Pro Thr Pro Ser Ser Trp Phe Ser Gly Leu Cys Pro  
 35 40 45

Trp Thr Glu Leu His His Cys Leu Arg  
 50 55

<210> 56  
 <211> 47  
 <212> PRT  
 <213> Homo sapiens

<400> 56  
 Met Ser His Gly Ser Gln Pro Phe Leu Leu Leu Ser Leu His Ile  
 1 5 10 15

Leu Ile Leu Ala Gly Ser Phe Leu Leu Phe Ser Pro Tyr Thr Ala Lys  
 20 25 30

Pro Ser Phe Ser Ser Ser Phe Ile Val Phe Pro Arg Ala Glu Met  
 35 40 45

<210> 57  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<400> 57  
 Met Val Leu Gly Phe Val Leu Leu Leu Phe Asn Met Gly Gly Thr Phe  
 1 5 10 15

Ser Asp Gly Arg Lys Glu Arg Arg Arg Thr Thr Phe Leu Arg Cys Cys  
 20 25 30

Asp Phe Ile Met Lys Pro Ser Pro Ala Leu Ile Leu Val Thr Ser Val  
 35 40 45

Gly Pro Val Leu Leu Gln Asn Ala Ser Trp Val Ser Val Cys Arg Thr  
 50 55 60

Leu Leu Ser  
 65

<210> 58  
 <211> 43  
 <212> PRT  
 <213> Homo sapiens

<400> 58  
 Met Tyr Phe Phe Phe Phe Leu Thr Phe Leu Ala Leu Trp Val Met Gly  
 1 5 10 15

Thr Thr Ala Met Ala Ser Pro Phe Phe Met Gly Tyr Gln Leu Gln Tyr  
 20 25 30

Gly Pro Gln Cys Cys Ser Gly His Phe Asn Asp  
 35 40

<210> 59  
 <211> 201  
 <212> PRT  
 <213> Homo sapiens

<400> 59  
 Met Val Thr Leu Ala Glu Leu Leu Val Leu Leu Ala Ala Leu Leu Ala  
 1 5 10 15

Thr Val Ser Gly Tyr Phe Val Ser Ile Asp Ala His Ala Glu Glu Cys  
 20 25 30

Phe Phe Glu Arg Val Thr Ser Gly Thr Lys Met Gly Leu Ile Phe Glu  
 35 40 45

Val Ala Glu Gly Gly Phe Leu Asp Ile Asp Val Glu Ile Thr Gly Pro  
 50 55 60

Asp Asn Lys Gly Ile Tyr Lys Gly Asp Arg Glu Ser Ser Gly Lys Tyr  
 65 70 75 80

Thr Phe Ala Ala His Met Asp Gly Thr Tyr Lys Phe Cys Phe Ser Asn  
 85 90 95

Arg Met Ser Thr Met Thr Pro Lys Ile Val Met Phe Thr Ile Asp Ile  
 100 105 110

Gly Glu Ala Pro Lys Gly Gln Asp Met Glu Thr Glu Ala His Gln Asn  
 115 120 125

Lys Leu Glu Glu Met Ile Asn Glu Leu Ala Val Ala Met Thr Ala Val  
 130 135 140

Lys His Glu Glu Glu Tyr Met Glu Val Arg Glu Arg Ile His Arg Ala  
 145 150 155 160

Ile Asn Asp Asn Thr Asn Ser Arg Val Val Leu Trp Ser Phe Phe Glu  
 165 170 175

Ala Leu Val Leu Val Ala Met Thr Leu Gly Gln Ile Tyr Tyr Leu Lys  
 180 185 190

Arg Phe Phe Glu Val Arg Arg Val Val  
 195 200

<210> 60

<211> 73

<212> PRT

<213> Homo sapiens

<400> 60

Met Glu Leu Leu Lys Cys Ser Trp Gln Leu Phe Phe Ser Phe Leu Thr  
 1 5 10 15

His Cys Ser Ala Ser Thr Ile Val Trp Leu Phe Val Gln His Arg Leu  
 20 25 30

Ser Gln Ser His Asn Lys Pro Phe Phe Gly Ile Leu Gln Arg Cys His  
 35 40 45

Ser Trp His Leu Asn Arg Glu Ser Phe Val Pro Asn Gln Ser Phe Ser  
 50 55 60

Ile Tyr Glu Ser Cys Ser Ile Arg Lys  
 65 70

<210> 61

<211> 47

<212> PRT

<213> Homo sapiens

<400> 61

Met Arg Leu Ser Arg Ala Ala His Asn Leu Gln Thr Ile Leu Tyr Ser  
 1 5 10 15

Val Phe Cys Leu Cys Leu His Val Ala Met Met Asp Arg Ser Pro Ser  
 20 25 30

Ser Ile Leu Ala Leu Trp Arg Ser Gly Ser Cys Ser Val Glu Ile  
 35 40 45

<210> 62

<211> 51

<212> PRT

<213> Homo sapiens

<400> 62

Met Leu Thr Leu Thr His Phe Val Ser Tyr Asp Tyr Phe Ile Val Lys  
1 5 10 15

Arg Leu Val Gly Trp Leu Val Gly Trp Leu Val Cys Phe Val Leu Val  
20 25 30

Ser Pro Phe Ile His Ser Leu Ser Thr Asn Tyr Asn Phe Leu Cys Phe  
35 40 45

Met Cys Gly  
50

<210> 63

<211> 587

<212> PRT

<213> Homo sapiens

<400> 63

Met Trp Arg Leu Gly Cys Leu Ile Trp Glu Val Phe Asn Gly Pro Leu  
1 5 10 15

Pro Arg Ala Ala Ala Leu Arg Asn Pro Gly Lys Ile Pro Lys Thr Leu  
20 25 30

Val Pro His Tyr Cys Glu Leu Val Gly Ala Asn Pro Lys Val Arg Pro  
35 40 45

Asn Pro Ala Arg Phe Leu Gln Asn Cys Arg Ala Pro Gly Gly Phe Met  
50 55 60

Ser Asn Arg Phe Val Glu Thr Asn Leu Phe Leu Glu Glu Ile Gln Ile  
65 70 75 80

Lys Glu Pro Ala Glu Lys Gln Lys Phe Phe Gln Glu Leu Ser Lys Ser  
85 90 95

Leu Asp Ala Phe Pro Glu Asp Phe Cys Arg His Lys Val Leu Pro Gln  
100 105 110

Leu Leu Thr Ala Phe Glu Phe Gly Asn Ala Gly Ala Val Val Leu Thr  
115 120 125

Pro Leu Phe Lys Val Gly Lys Phe Leu Ser Ala Glu Glu Tyr Gln Gln  
130 135 140

Lys Ile Ile Pro Val Val Val Lys Met Phe Ser Ser Thr Asp Arg Ala  
145 150 155 160

Met Arg Ile Arg Leu Leu Gln Gln Met Glu Gln Phe Ile Gln Tyr Leu  
165 170 175

Asp Glu Pro Thr Val Asn Thr Gln Ile Phe Pro His Val Val His Gly  
180 185 190

Phe Leu Asp Thr Asn Pro Ala Ile Arg Glu Gln Thr Val Lys Ser Met  
195 200 205

Leu Leu Leu Ala Pro Lys Leu Asn Glu Ala Asn Leu Asn Val Gln Leu  
 210 215 220  
 Met Lys His Phe Ala Arg Leu Gln Ala Lys Asp Glu Gln Gly Pro Ile  
 225 230 235 240  
 Arg Cys Asn Thr Thr Val Cys Leu Gly Lys Ile Gly Ser Tyr Leu Ser  
 245 250 255  
 Ala Ser Thr Arg His Arg Val Leu Thr Ser Ala Phe Ser Arg Ala Thr  
 260 265 270  
 Arg Asp Pro Phe Ala Pro Ser Arg Val Ala Gly Val Leu Gly Phe Ala  
 275 280 285  
 Ala Thr His Asn Leu Tyr Ser Met Asn Asp Cys Ala Gln Lys Ile Leu  
 290 295 300  
 Pro Val Leu Cys Gly Leu Thr Val Asp Pro Glu Lys Ser Val Arg Asp  
 305 310 315 320  
 Gln Ala Phe Lys Ala Ile Arg Ser Phe Leu Ser Lys Leu Glu Ser Val  
 325 330 335  
 Ser Glu Asp Pro Thr Gln Leu Glu Glu Val Glu Lys Asp Val His Ala  
 340 345 350  
 Ala Ser Ser Pro Gly Met Gly Gly Ala Ala Ala Ser Trp Ala Gly Trp  
 355 360 365  
 Ala Val Thr Gly Val Ser Ser Leu Thr Ser Lys Leu Ile Arg Ser His  
 370 375 380  
 Pro Thr Thr Ala Pro Thr Glu Thr Asn Ile Pro Gln Arg Pro Thr Pro  
 385 390 395 400  
 Glu Gly His Trp Glu Thr Gln Glu Glu Asp Lys Asp Thr Ala Glu Asp  
 405 410 415  
 Ser Ser Thr Ala Asp Arg Trp Asp Asp Glu Asp Trp Gly Ser Leu Glu  
 420 425 430  
 Gln Glu Ala Glu Ser Val Leu Ala Gln Gln Asp Asp Trp Ser Thr Gly  
 435 440 445  
 Gly Gln Val Ser Arg Ala Ser Gln Val Ser Asn Ser Asp His Lys Ser  
 450 455 460  
 Ser Lys Ser Pro Glu Ser Asp Trp Ser Ser Trp Glu Ala Glu Gly Ser  
 465 470 475 480  
 Trp Glu Gln Gly Trp Gln Glu Pro Ser Ser Gln Glu Pro Pro Asp  
 485 490 495  
 Gly Thr Arg Leu Ala Ser Glu Tyr Asn Trp Gly Gly Pro Glu Ser Ser  
 500 505 510  
 Asp Lys Gly Asp Pro Phe Ala Thr Leu Ser Ala Arg Pro Ser Thr Gln



515                      520                      525

Pro Arg Pro Asp Ser Trp Gly Glu Asp Asn Trp Glu Gly Leu Glu Thr  
530                      535                      540

Asp Ser Arg Gln Val Lys Ala Glu Leu Ala Arg Lys Lys Arg Glu Glu  
545                      550                      555                      560

Arg Arg Arg Glu Met Glu Ala Lys Arg Ala Glu Arg Lys Val Ala Lys  
565                      570                      575

Gly Pro Met Lys Leu Gly Ala Arg Lys Leu Asp  
580                      585

<210> 64  
<211> 76  
<212> PRT  
<213> Homo sapiens

<400> 64  
Met Val Val Asp Leu Phe Phe Tyr Leu Leu Cys Ile Phe Leu Val Leu  
1                      5                      10                      15

Trp Val Leu Glu Ala Met Ile Lys His Leu Met Tyr Ser Asp Met Ser  
20                      25                      30

Ala Leu Ile Ala Ser Phe Ser Ser Phe Leu Asn Cys Ile His Tyr Phe  
35                      40                      45

Gln Asn Arg Tyr Arg Tyr Ser Val Pro Pro Phe Glu Leu Leu Ala Cys  
50                      55                      60

Ser Cys Phe Pro Leu Ser Pro Lys Gln Gly Phe Phe  
65                      70                      75

<210> 65  
<211> 146  
<212> PRT  
<213> Homo sapiens

<400> 65  
Met Ala Ala Leu Leu Leu Leu Pro Leu Leu Leu Leu Pro Leu Leu  
1                      5                      10                      15

Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp Leu Pro Ala Ala  
20                      25                      30

Thr Ala Ala Arg Gly Ala Leu Glu Lys Ala Ser Gly Gln Arg Arg Glu  
35                      40                      45

Pro Glu Met Gln Arg Pro Glu Ala Ala Arg Ser Leu Pro Glu Gly Thr  
50                      55                      60

Val Pro Pro Glu Val Glu Glu Pro Pro Pro Leu Cys His Leu Glu Gln  
65                      70                      75                      80



1 5 10 15

Thr Val Ser Gly Tyr Phe Val Ser Ile Asp Ala His Ala Glu Glu Cys  
20 25 30

Phe Phe Glu Arg Val Thr Ser Gly Thr Lys Met Gly Leu Ile Phe Glu  
35 40 45

Val Ala Glu Gly Gly Phe Leu Asp Ile Asp Val Glu Ile Thr Gly Pro  
50 55 60

Asp Asn Lys Gly Ile Tyr Lys Gly Asp Arg Glu Ser Ser Gly Lys Tyr  
65 70 75 80

Thr Phe Ala Ala His Met Asp Gly Thr Tyr Lys Phe Cys Phe Ser Asn  
85 90 95

Arg Met Ser Thr Met Thr Pro Lys Ile Val Met Phe Thr Ile Asp Ile  
100 105 110

Gly Glu Ala Pro Lys Gly Gln Asp Met Glu Thr Glu Ala His Gln Asn  
115 120 125

Lys Leu Glu Glu Met Ile Asn Glu Leu Ala Val Ala Met Thr Ala Val  
130 135 140

Lys His Glu Gln Glu Tyr Met Glu Val Arg Glu Arg Ile His Arg Ala  
145 150 155 160

Ile Asn Asp Asn Thr Asn Ser Arg Val Val Leu Trp Ser Phe Phe Glu  
165 170 175

Ala Leu Val Leu Val Ala Met Thr Leu Gly Gln Ile Tyr Tyr Leu Lys  
180 185 190

Arg Phe Phe Glu Val Arg Arg Val Val  
195 200

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<210> 69
<211> 201
<212> PRT
<213> Homo sapiens
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<400> 69  
Met Val Thr Leu Ala Glu Leu Leu Val Leu Leu Ala Ala Leu Leu Ala  
1 5 10 15

Thr Val Ser Gly Tyr Phe Val Ser Ile Asp Ala His Ala Glu Glu Cys  
20 25 30  
Phe Phe Glu Arg Val Thr Ser Gly Thr Lys Met Gly Leu Ile Phe Glu  
35 40 45  
Val Ala Glu Gly Gly Phe Leu Asp Ile Asp Val Glu Ile Thr Gly Pro  
50 55 60  
Asp Asn Lys Gly Ile Tyr Lys Gly Asp Arg Glu Ser Ser Gly Lys Tyr

65					70					75					80
Thr	Phe	Ala	Ala	His	Met	Asp	Gly	Thr	Tyr	Lys	Phe	Cys	Phe	Ser	Asn
				85					90					95	
Arg	Met	Ser	Thr	Met	Thr	Pro	Lys	Ile	Val	Met	Phe	Thr	Ile	Asp	Ile
			100					105					110		
Gly	Glu	Ala	Pro	Lys	Gly	Gln	Asp	Met	Glu	Thr	Glu	Ala	His	Gln	Asn
		115					120					125			
Lys	Leu	Glu	Glu	Met	Ile	Asn	Glu	Leu	Ala	Val	Ala	Met	Thr	Ala	Val
	130					135					140				
Lys	His	Glu	Gln	Glu	Tyr	Met	Glu	Val	Arg	Glu	Arg	Ile	His	Arg	Ala
	145				150					155					160
Ile	Asn	Asp	Asn	Thr	Asn	Ser	Arg	Val	Val	Leu	Trp	Ser	Phe	Phe	Glu
				165					170					175	
Ala	Leu	Val	Leu	Val	Ala	Met	Thr	Leu	Gly	Gln	Ile	Tyr	Tyr	Leu	Lys
			180					185					190		
Arg	Phe	Phe	Glu	Val	Arg	Arg	Val	Val							
			195				200								

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<210> 70
<211> 12
<212> PRT
<213> Homo sapiens
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<400> 70
Met Gly Ser Ser Leu Ala Phe Ile Leu Phe Leu Pro
      1               5               10
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<210> 71
<211> 144
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (138)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 71  
Met Val Thr Leu Ala Glu Leu Leu Val Leu Leu Ala Ala Leu Leu Ala  
1 5 10 15

Thr Val Ser Gly Tyr Phe Val Ser Ile Asp Ala His Ala Glu Glu Cys  
20 25 30

Phe Phe Glu Arg Val Thr Ser Gly Thr Lys Met Gly Leu Ile Phe Glu  
35 40 45

Val Ala Glu Gly Gly Phe Leu Asp Ile Asp Val Glu Val Arg Ala Ser

50                      55                      60  
 Cys Pro Gln Leu Arg Leu Gly Arg Val Ala Thr Arg Gly Leu Val Ala  
 65                      70                      75                      80  
 Pro Gly Thr Gly Ala Gly Pro Val Trp Gly Val Gly Leu Glu Val Ala  
 85                      90                      95  
 Val Arg Val Leu Glu Lys Pro Arg Pro Pro Pro Pro Ala Pro Pro Arg  
 100                      105                      110  
 Pro Arg Arg Pro Pro Asn Gly Pro Phe Ser Arg Asp Leu Pro Gly Phe  
 115                      120                      125  
 Arg Asp Pro Leu Gly Ala Pro Ser Ala Xaa Leu Val Ala Leu Gly Phe  
 130                      135                      140

<210> 72  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (28)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 72  
 Met Arg Leu Phe Ser Gln Met Leu Lys Ser Trp Met Ala Leu Phe Met  
 1                      5                      10                      15  
 Arg Asn Val Trp Leu Glu Met Thr Ile Ala Thr Xaa Ile Gln  
 20                      25                      30

<210> 73  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 73  
 His Phe Asn Val Leu Ala Phe Pro Cys Asn Gln Phe Gly Gln Gln Glu  
 1                      5                      10                      15

Pro Asp Ser

<210> 74  
 <211> 381  
 <212> PRT  
 <213> Homo sapiens

<400> 74

Thr Arg Lys Ser Arg Pro Lys Arg Gly Gly His Arg Leu Trp Val Pro  
 1 5 10 15  
 Gly Pro Arg Asp Ser Arg Phe Ser Leu Arg Ala Met Ala Pro Ala Lys  
 20 25 30  
 Ala Thr Asn Val Val Arg Leu Leu Leu Gly Ser Thr Ala Leu Trp Leu  
 35 40 45  
 Ser Gln Leu Gly Ser Gly Thr Val Ala Ala Ser Lys Ser Val Thr Ala  
 50 55 60  
 His Leu Ala Ala Lys Trp Pro Glu Thr Pro Leu Leu Leu Glu Ala Ser  
 65 70 75 80  
 Glu Phe Met Ala Glu Glu Ser Asn Glu Lys Phe Trp Gln Phe Leu Glu  
 85 90 95  
 Thr Val Gln Glu Leu Ala Ile Tyr Lys Gln Thr Glu Ser Asp Tyr Ser  
 100 105 110  
 Tyr Tyr Asn Leu Ile Leu Lys Lys Ala Gly Gln Phe Leu Asp Asn Leu  
 115 120 125  
 His Ile Asn Leu Leu Lys Phe Ala Phe Ser Ile Arg Ala Tyr Ser Pro  
 130 135 140  
 Ala Ile Gln Met Phe Gln Gln Ile Ala Ala Asp Glu Pro Pro Pro Asp  
 145 150 155 160  
 Gly Cys Asn Ala Phe Val Val Ile His Lys Lys His Thr Cys Lys Ile  
 165 170 175  
 Asn Glu Ile Lys Lys Leu Leu Lys Lys Ala Ala Ser Arg Thr Arg Pro  
 180 185 190  
 Tyr Leu Phe Lys Gly Asp His Lys Phe Pro Thr Asn Lys Glu Asn Leu  
 195 200 205  
 Pro Val Val Ile Leu Tyr Ala Glu Met Gly Thr Arg Thr Phe Ser Ala  
 210 215 220  
 Phe His Lys Val Leu Ser Glu Lys Ala Gln Asn Glu Glu Ile Leu Tyr  
 225 230 235 240  
 Val Leu Arg His Tyr Ile Gln Lys Pro Ser Ser Arg Lys Met Tyr Leu  
 245 250 255  
 Ser Gly Tyr Gly Val Glu Leu Ala Ile Lys Ser Thr Glu Tyr Lys Ala  
 260 265 270  
 Leu Asp Asp Thr Gln Val Lys Thr Val Thr Asn Thr Thr Val Glu Asp  
 275 280 285  
 Glu Thr Glu Thr Asn Glu Val Gln Gly Phe Leu Phe Gly Lys Leu Lys  
 290 295 300  
 Glu Ile Tyr Ser Asp Leu Arg Asp Asn Leu Thr Ala Phe Gln Lys Tyr

305                      310                      315                      320  
 Leu Ile Glu Ser Asn Lys Gln Met Met Pro Leu Lys Val Trp Glu Leu  
                                  325                      330                      335  
 Gln Asp Leu Ser Phe Gln Ala Ala Ser Gln Ile Met Ser Ala Pro Val  
                                  340                      345                      350  
 Tyr Asp Ala Ile Lys Leu Met Lys Asp Ile Ser Gln Asn Phe Pro Ile  
                                  355                      360                      365  
 Lys Ala Arg Val Gln Met Ile Gly Asn Val Leu Ile Gly  
                                  370                      375                      380

<210> 75  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 75  
 Gly Thr Ser Pro Ser Ser Leu Gln Ser Phe Ile His Gly Val Thr Ser  
   1                                  5                                  10                                  15  
 Glu Ala Phe Ala Val Pro Phe Phe Met Ile Ile Cys Leu Ile Met Phe  
                                   20                                  25                                  30  
 Tyr Phe Ile Ala Leu Ala Gly Ala His Lys Arg Val Val Ile Gln Leu  
                                   35                                  40                                  45  
 Arg Glu Gln Leu Ser Leu Glu Ser Arg Asp Lys Cys Tyr Leu Ile Gln  
                                   50                                  55                                  60  
 Lys Leu Thr Glu Ala Gln Arg Asp Met Arg Asn  
                                   65                                  70                                  75

<210> 76  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 76  
 Phe Gly Thr Arg Lys Pro Glu Pro Lys Ser Val Val Pro Ser Gly Pro  
   1                                  5                                  10                                  15  
 Val Leu Ala Asn Val Ser Met Phe Gly Glu Lys Gln Gly Thr Met Gln  
                                   20                                  25                                  30  
 Val Phe Phe Leu Ser Glu Ile Gly Met Leu Trp Val Val Val Lys Met  
                                   35                                  40                                  45  
 Ala His Ser Ala Met Leu Val Ser His Thr Gln Asp Pro Thr Pro Ser  
                                   50                                  55                                  60  
 Arg Trp Pro Cys Ser Leu Ala Gln Ser Ile Leu Leu Thr Cys Ser Pro  
                                   65                                  70                                  75                                  80

Gln His Arg Phe Ser Leu Glu Arg Lys Ile Gln Leu Pro Pro Arg Arg  
 85 90 95

Trp Trp Ala Glu Gly Arg Glu Gly Cys Trp Val Arg Glu Arg Val Gly  
 100 105 110

Glu Arg Thr  
 115

<210> 77  
 <211> 185  
 <212> PRT  
 <213> Homo sapiens

<400> 77  
 His Ala Ser Gly Lys Cys Ser Arg Phe Arg Glu Ala Ala Ala Arg Arg  
 1 5 10 15

Ser Ile Leu Ser Ala Pro Leu Pro Arg Arg Ala Asp Met Gln Ala Pro  
 20 25 30

Arg Ala Ala Leu Val Phe Ala Leu Val Ile Ala Leu Val Pro Val Gly  
 35 40 45

Arg Gly Asn Tyr Glu Glu Leu Glu Asn Ser Gly Asp Thr Thr Val Glu  
 50 55 60

Ser Glu Arg Pro Asn Lys Val Thr Ile Pro Ser Thr Phe Ala Ala Val  
 65 70 75 80

Thr Ile Lys Glu Thr Leu Asn Ala Asn Ile Asn Ser Thr Asn Phe Ala  
 85 90 95

Pro Asp Glu Asn Gln Leu Glu Phe Ile Leu Met Val Leu Ile Pro Leu  
 100 105 110

Ile Leu Leu Val Leu Leu Leu Leu Ser Val Val Phe Leu Ala Thr Tyr  
 115 120 125

Tyr Lys Arg Lys Arg Thr Lys Gln Glu Pro Ser Ser Gln Gly Ser Gln  
 130 135 140

Ser Ala Leu Gln Thr Cys Glu Tyr Tyr Pro Lys Thr Cys Leu Gln Val  
 145 150 155 160

Gly Val Gly Leu Glu Lys Glu Gln Arg Cys Phe Lys Ile Lys Gln Gln  
 165 170 175

Gly Leu His Ile Ile Val Ser Asp Lys  
 180 185

<210> 78  
 <211> 618  
 <212> PRT  
 <213> Homo sapiens



04000-78  
 Gly Thr Ser Leu His Gly Arg Arg Val Arg Gly Leu Ser Phe Leu Val  
 1 5 10 15  
 Asn Asp Cys Ser Gly Arg Val Val Arg Glu Lys Trp Ser Ala Asp Met  
 20 25 30  
 Trp Arg Leu Gly Cys Leu Ile Trp Glu Val Phe Asn Gly Pro Leu Pro  
 35 40 45  
 Arg Ala Ala Ala Leu Arg Asn Pro Gly Lys Ile Pro Lys Thr Leu Val  
 50 55 60  
 Pro His Tyr Cys Glu Leu Val Gly Ala Asn Pro Lys Val Arg Pro Asn  
 65 70 75 80  
 Pro Ala Arg Phe Leu Gln Asn Cys Arg Ala Pro Gly Gly Phe Met Ser  
 85 90 95  
 Asn Arg Phe Val Glu Thr Asn Leu Phe Leu Glu Glu Ile Gln Ile Lys  
 100 105 110  
 Glu Pro Ala Glu Lys Gln Lys Phe Phe Gln Glu Leu Ser Lys Ser Leu  
 115 120 125  
 Asp Ala Phe Pro Glu Asp Phe Cys Arg His Lys Val Leu Pro Gln Leu  
 130 135 140  
 Leu Thr Ala Phe Glu Phe Gly Asn Ala Gly Ala Val Val Leu Thr Pro  
 145 150 155 160  
 Leu Phe Lys Val Gly Lys Phe Leu Ser Ala Glu Glu Tyr Gln Gln Lys  
 165 170 175  
 Ile Ile Pro Val Val Val Lys Met Phe Ser Ser Thr Asp Arg Ala Met  
 180 185 190  
 Arg Ile Arg Leu Leu Gln Gln Met Glu Gln Phe Ile Gln Tyr Leu Asp  
 195 200 205  
 Glu Pro Thr Val Asn Thr Gln Ile Phe Pro His Val Val His Gly Phe  
 210 215 220  
 Leu Asp Thr Asn Pro Ala Ile Arg Glu Gln Thr Val Lys Ser Met Leu  
 225 230 235 240  
 Leu Leu Ala Pro Lys Leu Asn Glu Ala Asn Leu Asn Val Glu Leu Met  
 245 250 255  
 Lys His Phe Ala Arg Leu Gln Ala Lys Asp Glu Gln Gly Pro Ile Arg  
 260 265 270  
 Cys Asn Thr Thr Val Cys Leu Gly Lys Ile Gly Ser Tyr Leu Ser Ala  
 275 280 285  
 Ser Thr Arg His Arg Val Leu Thr Ser Ala Phe Ser Arg Ala Thr Arg  
 290 295 300

Asp Pro Phe Ala Pro Ser Arg Val Ala Gly Val Leu Gly Phe Ala Ala  
 305 310 315 320  
 Thr His Asn Leu Tyr Ser Met Asn Asp Cys Ala Gln Lys Ile Leu Pro  
 325 330 335  
 Val Leu Cys Gly Leu Thr Val Asp Pro Glu Lys Ser Val Arg Asp Gln  
 340 345 350  
 Ala Phe Lys Ala Ile Arg Ser Phe Leu Ser Lys Leu Glu Ser Val Ser  
 355 360 365  
 Glu Asp Pro Thr Gln Leu Glu Glu Val Glu Lys Asp Val His Ala Ala  
 370 375 380  
 Ser Ser Pro Gly Met Gly Gly Ala Ala Ala Ser Trp Ala Gly Trp Ala  
 385 390 395 400  
 Val Thr Gly Val Ser Ser Leu Thr Ser Lys Leu Ile Arg Ser His Pro  
 405 410 415  
 Thr Thr Ala Pro Thr Glu Thr Asn Ile Pro Gln Arg Pro Thr Pro Glu  
 420 425 430  
 Gly His Trp Glu Thr Gln Glu Glu Asp Lys Asp Thr Ala Glu Asp Ser  
 435 440 445  
 Ser Thr Ala Asp Arg Trp Asp Asp Glu Asp Trp Gly Ser Leu Glu Gln  
 450 455 460  
 Glu Ala Glu Ser Val Leu Ala Gln Gln Asp Asp Trp Ser Thr Gly Gly  
 465 470 475 480  
 Gln Val Ser Arg Ala Ser Gln Val Ser Asn Ser Asp His Lys Ser Ser  
 485 490 495  
 Lys Ser Pro Glu Ser Asp Trp Ser Ser Trp Glu Ala Glu Gly Ser Trp  
 500 505 510  
 Glu Gln Gly Trp Gln Glu Pro Ser Ser Gln Glu Pro Pro Pro Asp Gly  
 515 520 525  
 Thr Arg Leu Ala Ser Glu Tyr Asn Trp Gly Gly Pro Glu Ser Ser Asp  
 530 535 540  
 Lys Gly Asp Pro Phe Ala Thr Leu Ser Ala Arg Pro Ser Thr Gln Pro  
 545 550 555 560  
 Arg Pro Asp Ser Trp Gly Glu Asp Asn Trp Glu Gly Leu Glu Thr Asp  
 565 570 575  
 Ser Arg Gln Val Lys Ala Glu Leu Ala Arg Lys Lys Arg Glu Glu Arg  
 580 585 590  
 Arg Arg Glu Met Glu Ala Lys Arg Ala Glu Arg Lys Val Ala Lys Gly  
 595 600 605  
 Pro Met Lys Leu Gly Ala Arg Lys Leu Asp

610

613

<210> 79  
 <211> 199  
 <212> PRT  
 <213> Homo sapiens

<400> 79  
 Arg Ser Gly Ile Pro Gly Ser Thr His Ala Ser Ala Arg Ala Pro Trp  
 1 5 10 15  
 Lys Glu Lys Ser Gln Leu Glu Arg Ala Ala Leu Gly Phe Arg Lys Gly  
 20 25 30  
 Gly Ser Gly Met Phe Ala Ser Gly Trp Asn Gln Thr Val Pro Ile Glu  
 35 40 45  
 Glu Ala Gly Ser Met Ala Ala Leu Leu Leu Leu Pro Leu Leu Leu Leu  
 50 55 60  
 Leu Pro Leu Leu Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp  
 65 70 75 80  
 Leu Pro Ala Ala Thr Ala Ala Arg Gly Ala Leu Glu Lys Ala Ser Gly  
 85 90 95  
 Gln Arg Arg Glu Pro Glu Met Gln Arg Pro Glu Ala Ala Arg Ser Leu  
 100 105 110  
 Pro Glu Gly Thr Val Pro Pro Glu Val Glu Glu Pro Pro Pro Leu Cys  
 115 120 125  
 His Leu Glu Gln Leu Trp Arg Cys Ser Ser Pro Leu Ala Gln Ser Phe  
 130 135 140  
 Cys Gly Ser Gly Ser Gly Trp Pro Arg Pro Ala Cys Ala Leu Pro Leu  
 145 150 155 160  
 Cys Pro Pro Pro Cys Ala Gly Ala Pro Cys Cys Thr Ala Ser Ala Ala  
 165 170 175  
 Ala Ala Arg Ala Arg Trp Cys Trp Arg Gln Ser Phe Trp Ser Pro Trp  
 180 185 190  
 Ser Arg Thr Cys Pro Pro  
 195

<210> 80  
 <211> 459  
 <212> PRT  
 <213> Homo sapiens

<400> 80  
 Pro Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Ala Arg Ser Leu  
 1 5 10 15

Glu Gly Glu Val Ser Ala Arg Thr Ser Gly Pro Arg Phe Ser Glu Gly  
 20 25 30  
 Arg Ile Arg Asp Val Cys Glu Arg Leu Glu Pro Asp Gly Ala Asp Arg  
 35 40 45  
 Gly Ser Gly Leu His Gly Cys Pro Pro Ala Ala Ala Pro Ala Ala Val  
 50 55 60  
 Ala Thr Ala Ala Ala Glu Ala Thr Pro Leu Ala Ala Val Ala Leu  
 65 70 75 80  
 Ala Ser Gly Gly Asp Ser Gly Glu Gly Ser Ala Gly Glu Gly Glu Arg  
 85 90 95  
 Ala Ala Pro Gly Ala Gly Asp Ala Ala Ala Gly Ser Gly Ala Glu Phe  
 100 105 110  
 Ala Gly Gly Asp Gly Ala Ala Arg Gly Gly Gly Ala Ala Ala Pro Leu  
 115 120 125  
 Ser Pro Gly Ala Thr Val Ala Leu Leu Leu Pro Ala Gly Pro Glu Phe  
 130 135 140  
 Leu Trp Leu Trp Phe Gly Leu Ala Lys Ala Gly Leu Arg Thr Ala Phe  
 145 150 155 160  
 Val Pro Thr Ala Leu Arg Arg Gly Pro Leu Leu His Cys Leu Arg Ser  
 165 170 175  
 Cys Gly Ala Arg Ala Leu Val Leu Ala Pro Glu Phe Leu Glu Ser Leu  
 180 185 190  
 Glu Pro Asp Leu Pro Ala Leu Arg Ala Met Gly Leu His Leu Trp Ala  
 195 200 205  
 Ala Gly Pro Gly Thr His Pro Ala Gly Ile Ser Asp Leu Leu Ala Glu  
 210 215 220  
 Val Ser Ala Glu Val Asp Gly Pro Val Pro Gly Tyr Leu Ser Ser Pro  
 225 230 235 240  
 Gln Ser Ile Thr Asp Thr Cys Leu Tyr Ile Phe Thr Ser Gly Thr Thr  
 245 250 255  
 Gly Leu Pro Lys Ala Ala Arg Ile Ser His Leu Lys Ile Leu Gln Cys  
 260 265 270  
 Gln Gly Phe Tyr Gln Leu Cys Gly Val His Gln Glu Asp Val Ile Tyr  
 275 280 285 290  
 Leu Ala Leu Pro Leu Tyr His Met Ser Gly Ser Leu Leu Gly Ile Val  
 290 295 300  
 Gly Cys Met Gly Ile Gly Ala Thr Val Val Leu Lys Ser Lys Phe Ser  
 305 310 315 320  
 Ala Gly Gln Phe Trp Glu Asp Cys Gln Gln His Arg Val Thr Val Phe

335 330 335  
 Gln Tyr Ile Gly Glu Leu Cys Arg Tyr Leu Val Asn Gln Pro Pro Ser  
 340 345 350  
 Lys Ala Glu Arg Gly His Lys Val Arg Leu Ala Val Gly Ser Gly Leu  
 355 360 365  
 Arg Pro Asp Thr Trp Glu Arg Phe Val Arg Arg Phe Gly Pro Leu Gln  
 370 375 380  
 Val Leu Glu Thr Tyr Gly Leu Thr Glu Gly Asn Val Ala Thr Ile Asn  
 385 390 395 400  
 Tyr Thr Gly Gln Arg Gly Ala Val Gly Arg Ala Ser Trp Leu Tyr Lys  
 405 410 415  
 Val Arg Gly Arg Glu Glu Thr Glu Asn Pro Trp Asn Ser Arg Gly Leu  
 420 425 430  
 Ala Gly Glu Gly Ala His Val Thr Ala Met Ile Gln Tyr Pro Gly Leu  
 435 440 445  
 Pro Phe Pro Ser Ile Ser Ser Pro Ser Pro  
 450 455

<210> 81  
 <211> 377  
 <212> PRT  
 <213> Homo sapiens

<400> 81  
 Ser Gly Gly Asp Ser Gly Glu Gly Ser Ala Gly Glu Gly Glu Arg Ala  
 1 5 10 15  
 Ala Pro Gly Ala Gly Asp Ala Ala Ala Gly Ser Gly Ala Glu Phe Ala  
 20 25 30  
 Gly Gly Asp Gly Ala Ala Arg Gly Gly Gly Ala Ala Ala Pro Leu Ser  
 35 40 45  
 Pro Gly Ala Thr Val Ala Leu Leu Leu Pro Ala Gly Pro Glu Phe Leu  
 50 55 60  
 Trp Leu Trp Phe Gly Leu Ala Lys Ala Gly Leu Arg Thr Ala Phe Val  
 65 70 75 80  
 Pro Thr Ala Leu Arg Arg Gly Pro Leu Leu His Cys Leu Arg Ser Cys  
 85 90 95  
 Gly Ala Arg Ala Leu Val Leu Ala Pro Glu Phe Leu Glu Ser Leu Glu  
 100 105 110  
 Pro Asp Leu Pro Ala Leu Arg Ala Met Gly Leu His Leu Trp Ala Ala  
 115 120 125  
 Gly Pro Gly Thr His Pro Ala Gly Ile Ser Asp Leu Leu Ala Glu Val

130 133 140  
 Ser Ala Glu Val Asp Gly Pro Val Pro Gly Tyr Leu Ser Ser Pro Gln  
 145 150 155 160  
 Ser Ile Thr Asp Thr Cys Leu Tyr Ile Phe Thr Ser Gly Thr Thr Gly  
 165 170 175  
 Leu Pro Lys Ala Ala Arg Ile Ser His Leu Lys Ile Leu Gln Cys Gln  
 180 185 190  
 Gly Phe Tyr Gln Leu Cys Gly Val His Gln Glu Asp Val Ile Tyr Leu  
 195 200 205  
 Ala Leu Pro Leu Tyr His Met Ser Gly Ser Leu Leu Gly Ile Val Gly  
 210 215 220  
 Cys Met Gly Ile Gly Ala Thr Val Val Leu Lys Ser Lys Phe Ser Ala  
 225 230 235 240  
 Gly Gln Phe Trp Glu Asp Cys Gln Gln His Arg Val Thr Val Phe Gln  
 245 250 255  
 Tyr Ile Gly Glu Leu Cys Arg Tyr Leu Val Asn Gln Pro Pro Ser Lys  
 260 265 270  
 Ala Glu Arg Gly His Lys Val Arg Leu Ala Val Gly Ser Gly Leu Arg  
 275 280 285  
 Pro Asp Thr Trp Glu Arg Phe Val Arg Arg Phe Gly Pro Leu Gln Val  
 290 295 300  
 Leu Glu Thr Tyr Gly Leu Thr Glu Gly Asn Val Ala Thr Ile Asn Tyr  
 305 310 315 320  
 Thr Gly Gln Arg Gly Ala Val Gly Arg Ala Ser Trp Leu Tyr Lys Val  
 325 330 335  
 Arg Gly Arg Glu Glu Thr Glu Asn Pro Trp Asn Ser Arg Gly Leu Ala  
 340 345 350  
 Gly Glu Gly Ala His Val Thr Ala Met Ile Gln Tyr Pro Gly Leu Pro  
 355 360 365  
 Phe Pro Ser Ile Ser Ser Pro Ser Pro  
 370 375  
  
 <210> 82  
 <211> 257  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 82  
 Met Gly Leu His Leu Trp Ala Ala Gly Pro Gly Thr His Pro Ala Gly  
 1 5 10 15  
 Ile Ser Asp Leu Leu Ala Glu Val Ser Ala Glu Val Asp Gly Pro Val

20 25 30  
 Pro Gly Tyr Leu Ser Ser Pro Gln Ser Ile Thr Asp Thr Cys Leu Tyr  
 35 40 45  
 Ile Phe Thr Ser Gly Thr Thr Gly Leu Pro Lys Ala Ala Arg Ile Ser  
 50 55 60  
 His Leu Lys Ile Leu Gln Cys Gln Gly Phe Tyr Gln Leu Cys Gly Val  
 65 70 75 80  
 His Gln Glu Asp Val Ile Tyr Leu Ala Leu Pro Leu Tyr His Met Ser  
 85 90 95  
 Gly Ser Leu Leu Gly Ile Val Gly Cys Met Gly Ile Gly Ala Thr Val  
 100 105 110  
 Val Leu Lys Ser Lys Phe Ser Ala Gly Gln Phe Trp Glu Asp Cys Gln  
 115 120 125  
 Gln His Arg Val Thr Val Phe Gln Tyr Ile Gly Glu Leu Cys Arg Tyr  
 130 135 140  
 Leu Val Asn Gln Pro Pro Ser Lys Ala Glu Arg Gly His Lys Val Arg  
 145 150 155 160  
 Leu Ala Val Gly Ser Gly Leu Arg Pro Asp Thr Trp Glu Arg Phe Val  
 165 170 175  
 Arg Arg Phe Gly Pro Leu Gln Val Leu Glu Thr Tyr Gly Leu Thr Glu  
 180 185 190  
 Gly Asn Val Ala Thr Ile Asn Tyr Thr Gly Gln Arg Gly Ala Val Gly  
 195 200 205  
 Arg Ala Ser Trp Leu Tyr Lys Val Arg Gly Arg Glu Glu Thr Glu Asn  
 210 215 220  
 Pro Trp Asn Ser Arg Gly Leu Ala Gly Glu Gly Ala His Val Thr Ala  
 225 230 235 240  
 Met Ile Gln Tyr Pro Gly Leu Pro Phe Pro Ser Ile Ser Ser Pro Ser  
 245 250 255  
 Pro

<210> 83  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<400> 83  
 Phe Ala Met Met Ser Pro Gln Glu Ser Gln Phe Gly Thr Pro Arg Gly  
 1 5 10 15  
 Thr Val Trp Pro His Leu Gln Val Gly Gly Val Leu Val Gly Trp Ala

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<210> 34
<211> 112
<212> PRT
<213> Homo sapiens
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<400> 84
Pro Leu Thr Pro Ser Phe Arg Ser Leu Leu Ser Asp Arg Trp Lys Gly
  1              5              10              15
Glu Asn Val Ala Thr Thr Glu Val Ala Glu Val Phe Glu Ala Leu Asp
      20              25              30
Phe Leu Gln Glu Val Asn Val Tyr Gly Val Thr Val Pro Gly His Glu
      35              40              45
Gly Arg Ala Gly Met Ala Ala Leu Val Leu Arg Pro Pro His Ala Leu
      50              55              60
Asp Leu Met Gln Leu Tyr Thr His Val Ser Glu Asn Leu Pro Pro Tyr
      65              70              75              80
Ala Arg Pro Arg Phe Leu Arg Leu Gln Ala Val Gly Ala Tyr Leu Pro
      85              90              95
Leu Thr Thr Ala Arg Tyr Ser Ala Leu Leu Ala Gly Asn Leu Arg Ile
      100              105              110

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<210> 85
<211> 422
<212> PRT
<213> Homo sapiens
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<400> 85
Met Pro Val Pro Glu Ile Gln Asp Gln Val Ser Cys Gln Ala His Val
      1           5           10           15
Asn Glu Ile Ile Lys Thr Ile Ile Ile His His Glu Thr Ile Phe Pro
      20           25           30
Asp Ala Lys Glu Leu Asp Gly Pro Val Tyr Glu Lys Cys Met Ala Gly
      35           40           45
Asp Asp Tyr Cys Asp Ser Pro Tyr Ser Glu His Gly Thr Leu Glu Glu
      50           55           60
Val Asp Gln Asp Ala Gly Thr Glu Pro His Thr Ser Glu Asp Glu Cys
      65           70           75           80

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Glu Pro Ile Glu Ala Ile Ala Lys Phe Asp Tyr Val Gly Arg Ser Ala  
 85 90 95  
 Arg Glu Leu Ser Phe Lys Lys Gly Ala Ser Leu Leu Leu Tyr His Arg  
 100 105 110  
 Ala Ser Glu Asp Trp Trp Glu Gly Arg His Asn Gly Ile Asp Gly Leu  
 115 120 125  
 Val Pro His Gln Tyr Ile Val Val Gln Asp Met Asp Asp Thr Phe Ser  
 130 135 140  
 Asp Thr Leu Ser Gln Lys Ala Asp Ser Glu Ala Ser Ser Gly Pro Val  
 145 150 155 160  
 Thr Glu Asp Lys Ser Ser Ser Lys Asp Met Asn Ser Pro Thr Asp Arg  
 165 170 175  
 His Pro Asp Gly Tyr Leu Ala Arg Gln Arg Lys Arg Gly Glu Pro Pro  
 180 185 190  
 Pro Pro Val Arg Arg Pro Gly Arg Thr Ser Asp Gly His Cys Pro Leu  
 195 200 205  
 His Pro Pro His Ala Leu Ser Asn Ser Ser Val Asp Leu Gly Ser Pro  
 210 215 220  
 Ser Leu Ala Ser His Pro Arg Gly Leu Leu Gln Asn Arg Gly Leu Asn  
 225 230 235 240  
 Asn Asp Ser Pro Glu Arg Arg Arg Arg Pro Gly His Gly Ser Leu Thr  
 245 250 255  
 Asn Ile Ser Arg His Asp Ser Leu Lys Lys Ile Asp Ser Pro Pro Ile  
 260 265 270  
 Arg Arg Ser Thr Ser Ser Gly Gln Tyr Thr Gly Phe Asn Asp His Lys  
 275 280 285  
 Pro Leu Asp Pro Glu Thr Ile Ala Gln Asp Ile Glu Glu Thr Met Asn  
 290 295 300  
 Thr Ala Leu Asn Glu Leu Arg Glu Leu Glu Arg Gln Ser Thr Ala Lys  
 305 310 315 320  
 His Ala Pro Asp Val Val Leu Asp Thr Leu Glu Gln Val Lys Asn Ser  
 325 330 335  
 Pro Thr Pro Ala Thr Ser Thr Glu Ser Leu Ser Pro Leu His Asn Val  
 340 345 350  
 Ala Leu Arg Ser Ser Glu Pro Gln Ile Arg Arg Ser Thr Ser Ser Ser  
 355 360 365  
 Ser Asp Thr Met Ser Thr Phe Lys Pro Met Val Ala Pro Arg Met Gly  
 370 375 380  
 Val Gln Leu Lys Pro Pro Ala Leu Arg Pro Lys Pro Ala Val Leu Pro

385

390

395

400

Lys Thr Asn Pro Thr Ile Gly Pro Ala Pro Pro Pro Gln Gly Pro Thr  
 105 410 415

Asp Lys Ser Cys Thr Met  
 420

<210> 86  
 <211> 150  
 <212> PRT  
 <213> Homo sapiens

<400> 86  
 Ser Trp His Arg Arg Thr Gly Ile Gly Asp Trp Gly Gly Trp Gly Gln  
 1 5 10 15

Lys Ala Leu Gly Lys Val Thr Pro Leu Leu Thr Leu Val Thr Leu Pro  
 20 25 30

Gly Glu Pro Gly Leu Leu Val Ala Pro Val Ser Gln Gln Ser Pro Phe  
 35 40 45

Leu Gly Tyr Ala Gly Gly Pro Glu Leu Ala Gln Gly Lys Leu Leu Lys  
 50 55 60

Asp Val Phe Arg Pro Gly Asp Val Phe Phe Asn Thr Gly Asp Leu Leu  
 65 70 75 80

Val Cys Asp Asp Gln Gly Phe Leu Arg Phe His Asp Arg Thr Gly Asp  
 85 90 95

Thr Phe Arg Tyr Leu Ser Ile Thr Gly Phe Ser Ser Trp Thr Ser Asp  
 100 105 110

Leu Cys Asp Pro Lys Leu Leu Asn Leu Asn Ser Leu Ile Cys His Leu  
 115 120 125

Asn Leu Gly Pro Lys Leu Ile Ser His Ser Gln Ile Ser Pro Phe His  
 130 135 140

Pro Cys Asp Thr Asp Leu  
 145 150